

What is claimed is:

1. A composition for oral uptake of substance comprising an appropriate amount of carbohydrates.
- 5 2. A composition for the oral delivery of one or more substances comprising an effective amount of an orally administered beta-glucan and one or more chemotherapeutic agents.
- 10 3. The composition of any one of claims 1 or 2, wherein the carbohydrate is glucan.
- 15 4. The composition of claim 3, wherein the glucan contains 1,3-1,6 or 1,3-1,4 mixed linkages or a mixture of both 1,3-1,6 and 1,3-1,4 mixed linkages.
- 20 5. The composition of claim 3, wherein the glucan enhances the efficacy of chemotherapeutic agents or anti-cancer antibodies.
- 25 6. The composition of claim 3, wherein the glucan is derived from grass, plants, mushroom, yeast, barley, fungi, wheat or seaweed.
7. The composition of claim 3, wherein the glucan is of high molecular weight.
8. The composition of claim 3, wherein the substance is a peptide, protein, RNA, DNA or plasmid.
- 30 9. The composition of claim 3, wherein the substance is a chemotherapeutic agent.

10. A composition comprising an effective amount of orally administered (1→3), (1→6) or (1→3), (1→4) beta-glucan capable of enhancing efficacy of IgM antibodies.
- 5 11. The composition of claim 10, wherein the antibody is an antibody against cancer.
12. The composition of claim 11, wherein the antibody is a tumor-binding antibody.
- 10 13. The composition of claim 12, wherein the antibody is capable of activating complement.